

13743 (63626)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	Terrence P. Meier)
)
Title:	TWO MATERIAL OVER MOLDED)
	FITMENT)
)
Serial No.:	10/619,956)
)
Filed:	July 15, 2003)
)
Examiner:	Patricia L. Nordmeyer)
)
Art Unit:	1772)
)
Conf. No.:	7793)

APPLICANT'S BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37

TABLE OF CONTENTS

REAL PARTY IN INTEREST	1
RELATED APPEALS AND INTERFERENCES	1
STATUS OF CLAIMS	1
STATUS OF AMENDMENTS	1
SUMMARY OF THE CLAIMED SUBJECT MATTER	1
I. The Invention Defined By Claim 1.....	1
II. The Invention Defined By Claim 18.....	2
GROUND OF REJECTION TO BE REVIEWED ON APPEAL	3
ARGUMENT.....	3
I. SUMMARY OF THE PRIOR ART APPLIED.....	3
II. THE EXAMINER HAS IMPROPERLY REJECTED CLAIMS 1, 2, 4, 18, 19 AND 24 IN THAT THE DISCLOSURE OF DE VAN ET AL., THE PRIMARY REFERENCE, HAS BEEN IMPROPERLY INTERPRETED	4
III. THE EXAMINER HAS ALSO IMPROPERLY REJECTED CLAIMS 3, 5-9, 20-23 AND 25-27 IN THAT THE DISCLOSURE OF DE VAN ET AL., THE PRIMARY REFERENCE, HAS BEEN IMPROPERLY INTERPRETED	7
CONCLUSION	8
TABLE OF AUTHORITIES	10
APPENDIX A - CLAIMS ON APPEAL.....	11
APPENDIX B - EVIDENCE.....	15
APPENDIX C - RELATED PROCEEDINGS.....	16

A P P E A L B R I E F

REAL PARTY IN INTEREST

Illinois Tool Works Inc., the Assignee, is the real party in interest

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1-9 and 18-27 are pending. These claims having been finally rejected are now on appeal.

Claims 10-17 have been withdrawn as directed to a non-elected species.

A pre-appeal brief request for review was filed in connection with the rejection of claims 1-9 and 18-27, and was acted upon, and a decision was issued that the application remained under appeal.

STATUS OF AMENDMENTS

An Amendment After Final was filed on April 18, 2006 but was not entered (see Advisory Action mailed April 26, 2006 indicating that the Amendment would not be entered). Accordingly, the present Appeal Brief is directed to the claims without the proposed After Final Amendment. No other amendments to pending claims 1-9 and 18-27 were filed and entered after the date of the final rejection.

SUMMARY OF THE CLAIMED SUBJECT MATTER

Claims 1 and 18 are the independent claims on appeal.

I. The Invention Defined By Claim 1.

As defined by claim 1, the present invention is directed to an over-molded fitment (10) for mounting and sealing to a flexible packaging material (P). (¶ 0021). The fitment

includes a flange (12) having first (16) and second sides and a spout (14) extending upwardly from the first side of the flange. (¶ 0022). A molded sealing media (24) is molded over and onto the first side of the flange. (¶ 0025).

The flange and spout are integral with one another and formed from a single first material. (¶¶ 0009, 0033, 0023). The sealing media is formed from a second material different from the first material. (¶ 0025).

The sealing media material has a density that is less than the density of the flange and spout material. (¶ 0028). The sealing media is disposed between the first side of the flange and the flexible packaging material when the fitment is mounted and sealed to the flexible packaging material. (¶¶ 0032, 0033, FIG. 1). The sealing media is heat activated to effectively weld the fitment to the flexible packaging material. (¶ 0034).

II. The Invention Defined By Claim 18.

As defined by claim 18, the invention is directed to a package formed from a flexible packaging material (P) having an over-molded fitment (10) mounted to the flexible packaging. (¶ 0021). As set forth in claim 18, the fitment includes a flange (12) having first (16) and second sides, a spout (14) extending upwardly from the first side of the flange, and a molded sealing media (24) molded over and onto the first side of the flange. (¶¶ 0022, 0025).

The flange and spout are integral with one another and formed from a single first material (¶¶ 0009, 0033, 0023), and the sealing media is formed from a second material that is different from the flange and spout material and has a lower density than that of the flange and spout material. (¶¶ 0025, 0028).

The sealing media is disposed between the first side of the flange and the flexible packaging material when the fitment is mounted and sealed to the flexible packaging material. (¶¶ 0032, 0033, FIG. 1). The sealing media is heat activated to effectively weld the fitment to the flexible packaging material. (¶ 0034).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether the Examiner improperly rejected claims 1, 2, 4, 18, 19 and 24 as unpatentable under 35 U.S.C. 103(a) over De Van et al., U.S. Patent No. 3,696,969 in view of Brown, U.S. Patent No. 5,203,470.

2. Whether the Examiner improperly rejected claims 3, 5-9, 20-23 and 25-27 as unpatentable under 35 U.S.C. 103(a) over De Van et al. in view of Brown and further in view of Knox, III et al., U.S. Patent No. 4,851,272.

ARGUMENT

I. Summary of the Prior Art Applied.

De Van et al., U.S. Patent No. 3,696,969

The Examiner characterizes De Van as disclosing a flange having first and second sides with an integral spout extending upwardly from the first side of the flange and a sealing media molded over and onto the first side of the flange. The Examiner states further that the material that is molded over through heat sealing, or covering the flange of the spout, is formed from a second, lower density material than the flange and spout material.

In interpretation of De Van, the Examiner states that “[m]olded is defined as to give shape of form to in a mold. The adhesive is given a shape when it is placed on the surface of the flange from the container that the adhesive is extruded.” (PTO Action mailed 2/28/2006, page 2, 4th paragraph.)

Brown, U.S. Patent No. 5,203,470

The Examiner characterizes Brown as disclosing a flange and spout formed from a first material (high density polyethylene) in which the spout has a thread formed on the outer surface. The Examiner states further that the “spout is sealed to the flexible material through heat sealing, or covering the flange of the spout, is formed from a second material different from the first material with a lower density . . . for the purpose of forming a bag in a box type container in which the spout is heat sealed to the bag to

form a liquid impervious connection.” (PTO Action mailed 10/26/2005. page 3, 1st paragraph.)

Knox, III et al., U.S. Patent No. 4,851,272

The Examiner characterizes Knox, III as disclosing a maleated polyolefin, a polyolefin mixed with an acid, and an ethylene octane copolymer, linear low density polyethylene, in a second material covering the flange spout in which the maleated polyolefin is present in a weight percent of about 18 for the purpose of forming a material that is strong enough to withstand jostling without leaking the product.

II. The Examiner has improperly rejected claims 1, 2, 4, 18, 19 and 24 in that the disclosure of De Van et al., the primary reference, has been improperly interpreted.

The invention as defined by claim 1 is directed to a plastic fitment or closure that has a flange and spout, and that includes a heat sealable sealing media molded onto the flange. The fitment is formed from one material and the sealing media is formed from a different material. Claims 2 and 4 both depend from claim 1 and add limitations directed to fitment materials (claim 2) and spout external threads (claim 4). Claim 18 is directed to a package formed from a flexible package material with the over-molded fitment (of claim 1) sealed to the package material. Claims 19 and 24 both depend from claim 18 and are also directed to fitment materials (claim 19) and spout external threads (claim 24). Accordingly, the present discussion focuses on claim 1 because the flaw in the rejection of claim 1 carried through to the other rejected claims, and as such the discussion applies equally well to the other claims, including independent claim 18.

Claim 1 recites that the sealing media is molded over and onto the first side of the flange. The claim also recites that the sealing media material has a density that is less than that of the flange and spout material and that the sealing media is disposed between the first side of the flange and the flexible packaging material when the fitment is mounted and sealed to the flexible packaging material. The sealing media is heat activated to effectively weld the fitment to the flexible packaging material.

The Examiner has failed to show each and every limitation of the claimed invention in the cited art, and accordingly has failed to make a prima facie case of

obviousness. "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP §2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. *Id. citing In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

With regard to the final criterion, to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

When applying 35 U.S.C. 103, the following tenants of patent law must be adhered to: (A) the claimed invention must be considered as a whole; (B) the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) reasonable expectation of success is the standard with which obviousness is determined. MPEP §2141 *citing Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

"The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If, however, the examiner does produce a prima facie case, the burden of coming forward with evidence or arguments shifts to the applicant who may submit additional evidence of non-obviousness, such as comparative test data showing that the claimed invention possesses improved properties not expected by the prior art." MPEP §2141.

Applicant submits that the Examiner has failed to show the claim recitation of "a molded sealing media molded over and onto the first side of the flange." The Examiner has taken the position that "De Van clearly states a sealing media molded over and onto

the first side of the flange, which is disposed between first side of the flange and the sealing media (Column 4, lines 4-5).” (PTO Action mailed 2/28/2006, page 2, 4th paragraph.) The Examiner then goes on to state that, “Molded is defined as to give shape to or form in a mold. The adhesive is given a shape when it is placed on the surface of the flange from the container that the adhesive is extruded [from]”. (PTO Action mailed 2/28/2006, page 2, 4th paragraph).

It Applicant’s position that the Examiner has incorrectly defined “molded” as it is used in the claims and the specification of the present application and has completely mischaracterized the disclosure of De Van as teaching that the adhesive is “molded.”

In the present application, Claim 1 recites that “a molded sealing media [is] molded over and onto the first side of the flange.” This clearly contemplates a material part that is molded onto the flange. The structure is described in the specification as follows:

[0023] The fitment 10 includes *a layer of material 24 that is over-molded on the face or side 16 of the flange 12* that is configured for sealing to the packaging P material (defining a sealing region 26). The over-mold 24 material is a low melt polymer formulated to provide a faster cycle time for sealing to the LDPE packaging P material. The low melt polymer serves as a tie layer between the HDPE fitment 10 material and the LDPE packaging P material.

[0024] *In a present fitment 10, the low melt tie layer 24 is molded over or onto the flange face 16. That is, subsequent to the injection molding process for forming the fitment 10, the low melt material 24 molded onto the fitment 10, over the flange face 16.* (Emphasis added).

Accordingly, it is clear from the specification that the sealing media is an element that is molded (for example by injection molding) onto the flange, subsequent to molding the fitment. It is not an applied adhesive, as may be extruded or applied from a bottle or tube, as analogized by the Examiner, and construing the term “molded” in such a manner is not in comport with the claims or the specification. *See, Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005)(*en banc*).

In contrast is the structure taught by De Van. The Examiner cites to column 4, lines 4-5 of De Van for support for the statement that “De Van clearly states a sealing media molded over and onto the first side of the flange, which is disposed between first side of the flange and the sealing media.” (PTO Action mailed 2/28/2006, page 2, 4th paragraph.) This is not what is taught by De Van. Specifically, the text of column 4, lines 1-5 is as follows, “As further shown in FIG. 3, tap 24 may be a molded plastic member having an enlarged inner flange 52 secured to the interior of bag 44, for example, by adhesive or plastic welding.” Not only does De Van not disclose an overmolded sealing media or material, but it contemplates either just an adhesive or perhaps a direct sealing or welding of the flange to the bag material. There is simply nothing that teaches the present overmolded media.

For the Examiner to assert that the “adhesive is given a shape when it is placed on the surface of the flange from the container that the adhesive is extruded [from]” is to completely read out of the claim the recitation for the sealing media to be overmolded. For the Examiner to say that the adhesive is molded because it is given a shape as it is placed on the surface, is to say that toothpaste is overmolded onto a toothbrush when it is squeezed from a tube. Neither is correct, and neither is contemplated by the claimed invention. Rather, what is claimed is an overmolded element of a different material. This is neither disclosed nor taught by De Van.

To the De Van reference, the Examiner has added the teaching of Brown. However, even with this reference, the present rejection is fatally flawed in that the Examiner has failed to show that the overmolded sealing media element is disclosed in De Van.

Accordingly, because this element is completely missing from De Van (as properly interpreted) and is neither taught nor even suggested by the Brown reference, the present rejection of claims 1, 2, 4, 18, 19 and 24, under 35 U.S.C. 103(a) over De Van et al. in view of Brown cannot stand.

III. The Examiner has also improperly rejected claims 3, 5-9, 20-23 and 25-27 in that the disclosure of De Van et al., the primary reference, has been improperly interpreted.

Similar to the argument set forth above, it is Applicant's position that the Examiner has failed to show each and every limitation of the claimed invention in the cited art, and accordingly has failed to make a prima facie case of obviousness. Specifically, the Examiner has again relied upon the De Van patent for its alleged teaching of an overmolded sealing media.

Claims 3 and 5-9 depend either directly or indirectly from independent claim 1. Similarly, claims 20-23 and 25-27 depend either directly or indirectly from independent claim 18. Each of the dependent claims includes the limitations of its base and any intervening claims. Accordingly, in order for the art of record to make obvious the claimed invention, the art, by necessity, must disclose each and every element of the base claims.

As set forth above, the De Van patent fails to show a molded sealing media molded over and onto the first side of the flange, and, the teachings of Knox, III and Brown do not compensate for this failure. Knox, III was cited by the Examiner for its teaching of a maleated polyolefin, a polyolefin mixed with an acid, and an ethylene octane copolymer, linear low density polyethylene, in a second material covering the flange spout. Brown was cited for its teaching of a flange and spout formed from a first material (high density polyethylene) in which the spout has a thread formed on the outer surface and in which the spout is sealed to the flexible material through heat sealing. Neither of these patents disclose or suggest a molded sealing media molded over and onto the first side of the flange.

Accordingly, the rejection of claims 3, 5-9, 20-23 and 25-27 as unpatentable under 35 U.S.C. 103(a) over De Van et al. in view of Brown and further in view of Knox, III et al. cannot stand for the same reasons that rejection of claims 1, 2, 4, 18, 19 and 24, over De Van in view of Brown cannot stand, and that is, that the art, taken as a whole, fails to disclose a molded sealing media molded over and onto the first side of the flange.

CONCLUSION

In conclusion, Applicant submits that the claims 1-9 and 18-27 as presently pending are allowable over the art of record because the Examiner has failed to show that the art of record, properly interpreted, discloses each and every limitation of the claimed

invention. Accordingly, Applicant respectfully requests that the Board reverse the decision of the Examiner finally rejecting claims 1-9 and 18-27.

Respectfully submitted,



By: _____
Mitchell J. Weinstein
Registration No. 37,963

Dated: February 12, 2007
LEVENFELD PEARLSTEIN, LLC.
2 North LaSalle Street
Suite 1300
Chicago, IL 60602
Telephone: (312) 476-7593
Facsimile: (312) 346-8434

TABLE OF AUTHORITIES

In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

In re Wilson, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (CCPA 1970).

Hodosh v. Block Drug Co., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005)(*en banc*).

MPEP §§ 2141, 2143.

APPENDIX A - CLAIMS ON APPEAL

1. An over-molded fitment configured for mounting and sealing to a flexible packaging material comprising:
 - a flange having first and second sides;
 - a spout extending upwardly from the first side of the flange; and
 - a molded sealing media molded over and onto the first side of the flange,wherein the flange and spout are integral with one another and formed from a single first material, and wherein the sealing media is formed from a second material different from the first material and having a density less than a density of the first material, the sealing media configured for disposition between the first side of the flange and the flexible packaging material when the fitment is mounted and sealed to the flexible packaging material, the sealing media being heat activated to effectively weld the fitment to the flexible packaging material.
2. The over-molded fitment in accordance with claim 1 wherein the first material is high density polyethylene.
3. The over-molded fitment in accordance with claim 2 wherein the second material is a homogeneously branched ethylene-octene copolymer, wherein the first material has a melting point temperature and the second material has a melting point temperature less than the melting point temperature of the first material.
4. The over-molded fitment in accordance with claim 1 including a thread formed on an outer surface of the spout.
5. The over-molded fitment in accordance with claim 1 wherein the first material has a melting point temperature about 110oF greater than a melting point temperature of the second material.

6. The over-molded fitment in accordance with claim 1 wherein the first material has a melting point temperature of about 265oF and the second material has a melting point temperature of about 155oF.

7. The over-molded fitment in accordance with claim 1 wherein the first material is an ethylene vinyl alcohol copolymer and wherein the second material is formed from a composition including an ethylene-octene copolymer.

8. The over-molded fitment in accordance with claim 7 wherein the second material is formed from a composition that further includes a maleated polyolefin.

9. The over-molded fitment in accordance with claim 8 wherein the ethylene-octene copolymer is present in a concentration of about 75 percent by weight of the second material and the maleated polyolefin is present in a concentration of about 25 percent by weight of the second material.

18. A package comprising:
a flexible packaging material;
an over-molded fitment configured for mounting to the flexible packaging, the over-molded fitment including a flange having first and second sides, a spout extending upwardly from the first side of the flange, and
a molded sealing media molded over and onto the first side of the flange,
wherein the flange and spout are integral with one another and formed from a single first material, and wherein the over-molded sealing media is formed from a second material different from the first material and having a lower density than a density of the first material, and wherein the sealing media is disposed between the first side of the flange and the flexible packaging material when the fitment is mounted and sealed to the flexible packaging material, the sealing media being heat activated to effectively weld the fitment to the flexible packaging material.

19. The package in accordance with claim 18 wherein the first material is high density polyethylene.

20. The package in accordance with claim 18 wherein the first material is an ethylene vinyl alcohol copolymer and wherein the second material is formed from a composition including an ethylene-octene copolymer.

21. The package in accordance with claim 20 wherein the second material is formed from a composition that further includes a maleated polyolefin.

22. The package in accordance with claim 21 wherein the ethylene-octene copolymer is present in a concentration of about 75 percent by weight of the second material and the maleated polyolefin is present in a concentration of about 25 percent by weight of the second material.

23. The package in accordance with claim 18 wherein the second material is a homogeneously branched ethylene-octene copolymer, the first material having a melting point temperature and the second material having a melting point temperature less than the melting point temperature of the first material, the sealing media configured for heat-sealing to the flexible packaging material.

24. The package in accordance with claim 18 including a thread formed on an outer surface of the spout.

25. The package in accordance with claim 23 wherein the first material has a melting point temperature about 110oF greater than a melting point temperature of the second material.

26. The package in accordance with claim 25 wherein the second material has a density of less than about 0.90 g/cc.

27. The package in accordance with claim 26 wherein the second material has a density of about 0.875 g/cc.

APPENDIX B -EVIDENCE

None

APPENDIX C –RELATED PROCEEDINGS

None